



Using Cancer Registry Data to Identify and Better Serve Diverse Populations

Public Health Problem

In New Jersey in 2002, an estimated 6,900 women were diagnosed with breast cancer, and an estimated 1,400 women died of breast cancer.

Evidence That Prevention Works

When breast cancer is diagnosed at a local stage, 97% of women still are alive 5 years later. The 5-year survival rate decreases to 21% when the disease is diagnosed after it has spread to other sites. Routine mammography screening is an especially effective means of detecting breast cancer at the earliest stages.

Program Example

The New Jersey State Cancer Registry (NJSCR) devised a study to identify, map, and characterize areas of New Jersey with significantly high proportions of advanced-stage breast cancer using a Geographic Information Systems (GIS) analysis and SaTScan (a statistical tool). Two areas in northeastern New Jersey were identified by this method as having unusually high proportions of late-stage breast cancer. Census data provided demographic information that allowed the populations in these two areas to be compared with the rest of the state. Analysis showed that the populations in these two areas were more likely to be black, Hispanic, and foreign-born and to speak a language other than English in the home. Over 90% of the women diagnosed with breast cancer, however, lived within 2 miles of a mammography screening center. Study results were shared with the New Jersey Cancer Education and Early Detection Program, which offers cancer screening services to underserved populations. Additional screening resources that were funded by CDC and the state have been directed to these areas. Particular initiatives include providing culturally sensitive screening information in a variety of languages such as Spanish, Polish, and Arabic.

Implications

New Jersey has a large and diverse population, and targeting public health resources in that state is a complex task; however, by using registry data and GIS analysis, specific intervention areas were identified. This project is an excellent example of science-driven public health decision making that addresses the problems of cancer prevention and control. The NJSCR plans to use this type of analysis to help guide decision making for disease control for other cancers such as cervical, colorectal, skin, and prostate.